(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 22 January 2004 (22.01.2004)

PCT

(10) International Publication Number WO 2004/007588 A1

(51) International Patent Classification7: A61K 9/16

C08G 63/08,

(21) International Application Number:

PCT/NL2003/000519

(22) International Filing Date:

16 July 2003 (16.07.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 02077878.3

16 July 2002 (16.07.2002) EP

(71) Applicant (for all designated States except US): POLY-GANICS B.V. [NL/NL]; L.J. Zielstraweg 1, NL-9713 GX Groningen (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): HISSINK, Catharina, Everdina [NL/NL]; Damsterdiep 193, NL-9713 EC Groningen (NL). MEYBOOM, Ronald [NL/NL]; Jorissenweg 4, NL-9751 VT Haren (NL). FLIPSEN, Theodorus, Adrianus, Cornelius [NL/NL]; Griffeweg 66, NL-9723 DR Groningen (NL).

- (74) Agent: PRINS, A.W.; NIEUWE PARKLAAN 97, NL-2587 BN DEN HAAG (NL).
- (81) Designated States (national): AE, AG, AL, AM, AT (utility model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (utility model), DE, DK (utility model), DK, DM, DZ, EC, EE (utility model), EE, ES, FI (utility model), FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK (utility model), SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: BIODEGRADABLE PHASE SEPARATED SEGMENTED MULTI BLOCK CO-POLYMERS

(57) Abstract: The invention is directed to biodegradable, thermoplastic, phase separated segmented multi-block copolymers. The copolymers of the present invention find use in various biomedical applications as well as in pharmaceutical applications. According to the invention a biodegradable, phase separated copolymer is provided, comprising segments of a soft prepolymer (A) having a Tg lower than 37°C; and segments of a hard prepolymer (B) having a phase transition temperature Tm of 40-100°C.